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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,973	08/15/2006	Philippe Gentric	FR040021	8758

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EXAMINER	
ALAVI, AMIR	

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
08/18/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/597,973	GENTRIC, PHILIPPE	
	Examiner	Art Unit	
	Amir Alavi	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20061220*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

- Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

- Applicant is reminded of the proper language and format for an abstract of the disclosure.
- The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
- The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- *Claims 1 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kalevo et al. (USPAP 2001/0017942 A1), hereinafter, "Kalevo".*

Regarding claims 1 and 6, Kalevo recites, dividing the large still picture into a set of pieces, said pieces having a size substantially equal to the display size (Please note, figures 3-5 in correlation to the Abstract of the invention. As indicated encoding a digital image, in which the digital image is divided into blocks (C, L, U, UL, UR), wherein a spatial prediction for a block (C) is performed to reduce the amount of information to be transmitted, wherein at least one prediction method (P1-P13) is defined. A classification is determined for at least one neighbouring block (L, U) of said block (C) to be predicted according to the contents of said neighbouring block (L, U), and a prediction method (P1-P13) is selected for the current block (C) on the basis of at

least one said classification), ranking the pieces of the large still picture according to a predetermined scanning order, encoding the set of pieces using a predictive block-based compression technique according to said predetermined scanning order so as to obtain a video sequence (Please note, paragraphs 0141 and 0077. As indicated examples of displacement pairs using 512 displacements for 8.times.8 blocks are presented in tables 9a and 9b. In this example the scanning order of the tables is from top-left to bottom-right row by row. In alternative embodiments of the invention, the search range may be different from that depicted in FIG. 5m and/or the displacement between the reference block B and the current block may be defined differently. A subset of prediction methods for each context class combination is defined and the prediction methods are prioritized (ranked) in each subset. Then, the prediction method used to predict the content of the current block C is selected from a subset of prediction methods.The prediction methods within a subset differ from each other and correspond to those prediction methods that are most likely to provide an accurate prediction for block C, in the event of particular classifications being obtained for neighbouring blocks like L and U.) and decoding and displaying the video sequence on the display (Please note, paragraph 0150. As indicated when the prediction method has been determined, the predictor 16 can reconstruct the current block C and save it to the frame memory 14. In a situation where prediction error information is also received, that information is first decoded in the decoder 12, if necessary, and combined with the pixel values of the reconstructed block C. Now the current block C is ready to be directed to the output 15 of the receiver).

Regarding claim 7, Kalevo recites, a computer program product (Please note, figure 7).

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- *Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalevo et al. (USPAP 2001/0017942 A1), hereinafter, "Kalevo" in view of Goldberg et al. (USPN 5,963,203), hereinafter, "Goldberg".*

Regarding claim 2, Kalevo recites, dividing the large still picture into a set of pieces, said pieces having a size substantially equal to the display size (Please note, figures 3-5 in correlation to the Abstract of the invention. As indicated encoding a digital image, in which the digital image is divided into blocks (C, L, U, UL, UR), wherein a spatial prediction for a block (C) is performed to reduce the amount of information to be

transmitted, wherein at least one prediction method (P1-P13) is defined. A classification is determined for at least one neighbouring block (L, U) of said block (C) to be predicted according to the contents of said neighbouring block (L, U), and a prediction method (P1-P13) is selected for the current block (C) on the basis of at least one said classification), ranking the pieces of the large still picture according to a predetermined scanning order, encoding the set of pieces using a predictive block-based compression technique according to said predetermined scanning order so as to obtain a video sequence (Please note, paragraphs 0141 and 0077. As indicated examples of displacement pairs using 512 displacements for 8.times.8 blocks are presented in tables 9a and 9b. In this example the scanning order of the tables is from top-left to bottom-right row by row. In alternative embodiments of the invention, the search range may be different from that depicted in FIG. 5m and/or the displacement between the reference block B and the current block may be defined differently. A subset of prediction methods for each context class combination is defined and the prediction methods are prioritized (ranked) in each subset. Then, the prediction method used to predict the content of the current block C is selected from a subset of prediction methods.The prediction methods within a subset differ from each other and correspond to those prediction methods that are most likely to provide an accurate prediction for block C, in the event of particular classifications being obtained for neighbouring blocks like L and U.) and decoding and displaying the video sequence on the display (Please note, paragraph 0150. As indicated when the prediction method has been determined, the predictor 16 can reconstruct the current block C and save it to the frame memory 14. In a situation where

prediction error information is also received, that information is first decoded in the decoder 12, if necessary, and combined with the pixel values of the reconstructed block C. Now the current block C is ready to be directed to the output 15 of the receiver).

Kalevo does not expressly recite, wherein dividing and ranking are based on a traveling shot.

Goldberg recites, wherein dividing and ranking are based on a traveling shot (Please note, column 5, lines 63-67 and column 6, lines 1-7. As indicated the interactive video interfaces of the present invention make use of a "root" image comprising a plurality of basic frames arranged to form a quasi-three dimensional object. It is preferred that the relative placement positions of the basic frames be arranged so as to indicate visually some underlying motion in the video sequence. Thus, for example, if the video sequence corresponds to a traveling shot moving down a hallway and turning a corner, the envelope of the set of basic frames preferably does not have a parallelepiped shape but, instead, composes a "pipe" of rectangular section and bending, in a way corresponding to the camera travel during filming of the video sequence).

Kalevo & Goldberg are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize this traveling shot of Goldberg in Kalevo's invention.

The suggestion/motivation for doing so would have been as indicated by Goldberg, on column 6, lines 1-7, to correspond to the camera travel during filming of the video sequence.

Therefore, it would have been obvious to combine Goldberg with Kalevo to obtain the invention as specified in claim 2.

- *Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalevo et al. (USPAP 2001/0017942 A1), hereinafter, "Kalevo" in view of Yasui et al. (USPN 6,091,833), hereinafter, "Yasui".*

Regarding claims 3-4, Kalevo recites, dividing the large still picture into a set of pieces, said pieces having a size substantially equal to the display size (Please note, figures 3-5 in correlation to the Abstract of the invention. As indicated encoding a digital image, in which the digital image is divided into blocks (C, L, U, UL, UR), wherein a spatial prediction for a block (C) is performed to reduce the amount of information to be transmitted, wherein at least one prediction method (P1-P13) is defined. A classification is determined for at least one neighbouring block (L, U) of said block (C) to be predicted according to the contents of said neighbouring block (L, U), and a prediction method (P1-P13) is selected for the current block (C) on the basis of at least one said classification), ranking the pieces of the large still picture according to a predetermined scanning order, encoding the set of pieces using a predictive block-based compression technique according to said predetermined scanning order so as to obtain a video sequence (Please note, paragraphs 0141 and 0077. As indicated examples of displacement pairs using 512 displacements for 8.times.8 blocks are presented in tables 9a and 9b. In this example the scanning order of the tables is from top-left to bottom-right row by row. In alternative embodiments of the invention, the

search range may be different from that depicted in FIG. 5m and/or the displacement between the reference block B and the current block may be defined differently. A subset of prediction methods for each context class combination is defined and the prediction methods are prioritized (ranked) in each subset. Then, the prediction method used to predict the content of the current block C is selected from a subset of prediction methods.The prediction methods within a subset differ from each other and correspond to those prediction methods that are most likely to provide an accurate prediction for block C, in the event of particular classifications being obtained for neighbouring blocks like L and U.) and decoding and displaying the video sequence on the display (Please note, paragraph 0150. As indicated when the prediction method has been determined, the predictor 16 can reconstruct the current block C and save it to the frame memory 14. In a situation where prediction error information is also received, that information is first decoded in the decoder 12, if necessary, and combined with the pixel values of the reconstructed block C. Now the current block C is ready to be directed to the output 15 of the receiver).

Kalevo does not expressly recite, detecting contours wherein continuous scanning of the contours are detected.

Yasui recites, detecting contours wherein continuous scanning of the contours are detected (Please note, column 6, lines 9-18. As indicated the lane contour detector 400 is likewise connected to the spatial frequency separator 200, receives therefrom the high spatial frequency signal SH, thus detects the contour of the road from the perspective image Vi, and generates a road contour signal Sre. The lane

contour detector 400 also generates a region limiting signal Sr that limits the scanning area used for contour detection, and inputs this signal to the spatial frequency separator 200).

Kalevo & Yasui are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize this detecting contours wherein continuous scanning of the contours are detected of Yasui in Kalevo's invention.

The suggestion/motivation for doing so would have been as indicated by Yasui, on column 6, lines 18-23, the region limiting signal Sr is used to limit the area in the perspective image Vi that is scanned for contour detection to the area around the detected contour as a means of reducing the processing load.

Therefore, it would have been obvious to combine Yasui with Kalevo to obtain the invention as specified in claims 3-4.

- *Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalevo et al. (USPAP 2001/0017942 A1), hereinafter, "Kalevo".*

Regarding claim 5, Kalevo recites, dividing the large still picture into a set of pieces, said pieces having a size substantially equal to the display size (Please note, figures 3-5 in correlation to the Abstract of the invention. As indicated encoding a digital image, in which the digital image is divided into blocks (C, L, U, UL, UR), wherein a spatial prediction for a block (C) is performed to reduce the amount of information to be transmitted, wherein at least one prediction method (P1-P13) is defined. A classification is determined for at least one neighbouring block (L, U) of said block (C) to be predicted according to the contents of said neighbouring block (L, U), and a prediction method (P1-P13) is selected for the current block (C) on the basis of at least one said classification), ranking the pieces of the large still picture according to a predetermined scanning order, encoding the set of pieces using a predictive block-based compression technique according to said predetermined scanning order so as to obtain a video sequence (Please note, paragraphs 0141 and 0077. As indicated examples of displacement pairs using 512 displacements for 8.times.8 blocks are presented in tables 9a and 9b. In this example the scanning order of the tables is from top-left to bottom-right row by row. In alternative embodiments of the invention, the search range may be different from that depicted in FIG. 5m and/or the displacement

between the reference block B and the current block may be defined differently. A subset of prediction methods for each context class combination is defined and the prediction methods are prioritized (ranked) in each subset. Then, the prediction method used to predict the content of the current block C is selected from a subset of prediction methods.The prediction methods within a subset differ from each other and correspond to those prediction methods that are most likely to provide an accurate prediction for block C, in the event of particular classifications being obtained for neighbouring blocks like L and U.) and decoding and displaying the video sequence on the display (Please note, paragraph 0150. As indicated when the prediction method has been determined, the predictor 16 can reconstruct the current block C and save it to the frame memory 14. In a situation where prediction error information is also received, that information is first decoded in the decoder 12, if necessary, and combined with the pixel values of the reconstructed block C. Now the current block C is ready to be directed to the output 15 of the receiver).

Kalevo does not recite expressly, wherein zooming a part of the large still picture.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to design a system for zooming a part of the large still picture.

Applicant has not disclosed that such design provides an advantage, is used for a particular purpose or solves a stated problem.

One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well for zooming a part of the large still picture because it facilitates better visualization analysis.

Therefore, it would have been obvious to one of ordinary skill in this art to modify Kalevo's with zooming a part of the large still picture to obtain the invention as specified in claim 5.

Examiner's Note

- The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the Examiner believed are the most relevant to the claimed subject matter.
- However, it is incumbent upon the Applicant to analyze the Prior Art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate Examiner's rationale of record.
- A Prior Art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).* However, "the Prior Art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed ...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386. The examiner can normally be reached on Mon-Friday. 8:30 am thru 5:00pm.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

- Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amir Alavi/
Primary Examiner, Art Unit 2624
13 August 2009